

## Abstract

A method for producing dimensionally accurate metal foam from a foamable, powder metallurgically produced metal semifinished product having a melting point  $> 200\text{ }^{\circ}\text{C}$  involving: the introduction of material, which is capable of foaming above  $200\text{ }^{\circ}\text{C}$ , into a mold which has a coefficient of expansion of less than  $3\text{ K}^{-1}$ . Controlled heating of the foamable material inside the mold is performed while radiators foam the material, and the foamed product formed thereby removed from the mold. A device for producing dimensionally accurate thermally foamed metal foam parts that is has a thin-walled mold, which is stable at the melting temperature of the metal foam and which has a coefficient of expansion of  $< 3\text{ K}^{-1}$ ; a controllable irradiating device, and; a controller that controls the irradiating device based on the measurement given by a radiation measuring device.